

REMARKS

Entry of the foregoing, reexamination and further and favorable reconsideration of the subject application in light of the following remarks, pursuant to and consistent with 37 C.F.R. § 1.116, are respectfully requested.

By the foregoing amendment, claims 1, 2, 9 and 21 have been amended. Support for such amendments can be found throughout the originally filed application. Additionally, claims 5, 6 and 8 have been canceled without prejudice or disclaimer. Applicants reserve the right to file a continuation application directed to any of the canceled subject matter. No new matter has been added.

Claims 1-9, 12-13 and 21-24 have been rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for purportedly failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention. This rejection, including each individual rejection herein, is respectfully traversed. Applicants will separately address each of the Examiner's points with regard to this rejection.

(i) Regarding claims 1-6, 8-9, 12-13, and 21-24, the Examiner has indicated that the metes and bounds of the term "homologous recombinant protein" is unclear.

To expedite prosecution in the present application and not to acquiesce to the Examiner's rejection, claim 8 has been canceled without prejudice or disclaimer and claims 1 and 21 have been amended to refer to a "homologous recombination protein" (*i.e.*, a protein involved in homologous recombination), which reflects the Examiner's suggestion. In light of the above, the Examiner's rejection is believed to be rendered moot.

(ii) Regarding claims 1-9, 12-13, and 23-24, the Examiner has alleged that recitation of "said other double stranded DNA" lacks sufficient antecedent basis.

To expedite prosecution in the present application and not to acquiesce to the Examiner's rejection, claim 1 has been amended to refer to first and second double-stranded DNA (rather than "one" and the "other"). The Examiner's rejection is therefore believed to be overcome.

(iii) Regarding claims 1-9, 12-13, and 23-24, the Examiner has alleged that the metes and bounds of the phrase "said double stranded DNA comprises a sequence that is homologous" is unclear in that there are two double stranded DNAs recited in the claim and the phrase implies that any dinucleotide within the double stranded DNA can be homologous to the single stranded end.

To expedite prosecution in the present application and not to acquiesce to the Examiner's rejection, claim 1 has been amended to refer to "said first double-stranded end comprises a sequence that is homologous". The Examiner's rejection is therefore believed to be overcome.

(iv) Regarding claims 1-9, 12-13, and 23-24, the Examiner has argues that recitation of "the DNA complex" lacks sufficient antecedent basis.

To expedite prosecution in the present application and not to acquiesce to the Examiner's rejection, claim 1 has been amended to refer to "a DNA complex". The Examiner's rejection is therefore believed to be overcome.

(v) Regarding claims 2-5, the Examiner has stated that the metes and bounds of

the phrase "said three-stranded structure" is unclear in that the circular DNA complex has three-stranded structures in two places.

To expedite prosecution in the present application and not to acquiesce to the Examiner's rejection, claim 2 has been amended to refer to "said three-stranded structures" in accordance with the Examiner's suggestion. In light of such amendment, the Examiner's rejection is believed to be rendered moot.

(vi) Regarding claims 2-5, the Examiner has argued that the metes and bounds of the phrase "respectively homologous" is unclear in that it is uncertain as what the term "respectively" is referring.

To expedite prosecution in the present application and not to acquiesce to the Examiner's rejection, claim 2 has been amended to refer to "respectively homologous to each single-stranded nucleotide region". In light of such amendment, the Examiner's rejection is believed to be rendered moot.

(vii) Regarding claim 5, the Examiner has alleged that the metes and bounds of the phrase "competent cells" is unclear in that it is uncertain whether the term "competent" denotes transformation competent cells or cells competent for another function, such as replication.

The phrase "competent cells" is a well-established language in the art and the skilled artisan would readily understand its meaning particularly in light of the present application. However, in the interest of expediting prosecution and not to acquiesce to the Examiner's rejection, claims 5 and 6 have been canceled without prejudice or disclaimer. The

Examiner's rejection is thereby rendered moot.

(viii) Regarding claims 5, 6, and 21, the Examiner has argued that the metes and bounds of the phrase "confers the ability of auto-replicating" is unclear in that it is uncertain to what the DNA is conferring the ability of auto-replication.

As mentioned above, claims 5 and 6 have been canceled without prejudice or disclaimer simply to expedite prosecution and not to acquiesce to the Examiner's rejection. Claim 21 has been amended to delete recitation of "wherein said DNA comprises a DNA sequence which confers to the double-stranded region of said DNA, the ability of auto-replicating within competent cells[.]" The Examiner's rejection is thus believed to be overcome.

(ix) Regarding claim 9, the Examiner has asserted that the phrase "the contact" lacks sufficient antecedent basis.

To expedite prosecution in the present application and not to acquiesce to the Examiner's rejection, claim 9 has been amended to refer to the "step of contacting in part (a)". Such an amendment is believed to overcome the Examiner's rejection.

In view of all of the above, the Examiner is respectfully requested to withdraw the rejection under 35 U.S.C. § 112, second paragraph.

Claims 1-6, 8-9, 12-13 and 21-24 have been rejected under 35 U.S.C. § 112, first paragraph, for allegedly failing to comply with the written description requirement. This rejection is respectfully traversed.

The Examiner's rejection in this regard is two-fold. First, the Examiner has

asserted that the specification fails to describe a representative number of species sufficient to demonstrate possession of the claimed genus of "homologous recombinant proteins."

Applicants respectfully disagree. However, to expedite prosecution in the present application and not to acquiesce to the Examiner's rejection, applicants have amended independent claims 1 and 21 to specify that the homologous recombination protein is Rec A protein. Applicants reserve the right to file a continuation application directed to homologous recombination proteins in general.

Second, the Examiner has argued, with regard to claims 5, 6 and 21, that the specification does not provide adequate description for "a genus of DNA sequences, which confer the ability to auto-replicate on the double stranded region of DNA." Applicants once again respectfully disagree with the Examiner. However, to expedite prosecution in the present application and not to acquiesce to the Examiner's rejection, applicants have canceled claims 5 and 6, and amended claim 21 to delete recitation of the phrase regarding conferring the ability to auto-replicate within competent cells.

In view of the above, withdrawal of the written description rejection under 35 U.S.C. § 112, first paragraph, is respectfully requested.

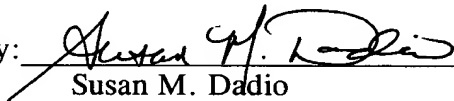
From the foregoing, further and favorable action in the form of a Notice of Allowance is respectfully requested and such action is earnestly solicited.

In the event that there are any questions concerning this Amendment and Reply or the application in general, the Examiner is respectfully requested to telephone the undersigned so that prosecution of the application may be expedited.

Respectfully submitted,

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